

WEST Search History

DATE: Wednesday, May 09, 2007

| Hide? | <u>Set</u> <u>Name</u> | <u>Query</u> | <u>Hit</u> <u>Count</u> |
|--------------------------|---------------------------|--|----------------------------|
| | | <i>DB=PGPB,USPT; PLUR=YES; OP=OR</i> | |
| <input type="checkbox"/> | L13 | (cycloolefin AND metathesis AND ring NEAR1 open AND chain transfer OR divinylbenzene).clm. | 245701 |
| <input type="checkbox"/> | L12 | (526/902)![CCLS] | 80 |
| <input type="checkbox"/> | L11 | (428/396)![CCLS] | 378 |
| <input type="checkbox"/> | L10 | (427/385.5)![CCLS] | 2945 |
| <input type="checkbox"/> | L9 | (523/211)![CCLS] | 198 |
| <input type="checkbox"/> | L8 | (526/283)![CCLS] | 607 |
| <input type="checkbox"/> | L7 | (526/282)![CCLS] | 692 |
| <input type="checkbox"/> | L6 | (526/281)![CCLS] | 913 |
| <input type="checkbox"/> | L5 | (526/308)![CCLS] | 815 |
| <input type="checkbox"/> | L4 | L3 and @pd > 20060926 | 1 |
| <input type="checkbox"/> | L3 | (264/331.15)![CCLS] | 202 |
| <input type="checkbox"/> | L2 | (264/236)![CCLS] | 1080 |
| | | <i>DB=USPT; PLUR=YES; OP=OR</i> | |
| <input type="checkbox"/> | L1 | (156/306.9)![CCLS] | 233 |

END OF SEARCH HISTORY

S/N 10/567,782

LEGAL REPRESENTATIVE: KIRKPATRICK & LOCKHART LLP, 535 SMITHFIELD STREET,
PITTSBURGH, PA, 15222

NUMBER OF CLAIMS: 14

EXEMPLARY CLAIM: CLM-01-67

NUMBER OF DRAWINGS: 13 Drawing Page(s)

LINE COUNT: 7081

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD [0129] It appears that this interaction occurs to a significant degree, enough to affect the molecular weights in a conventional free radical polymerization for acrylates and acrylonitrile. Any reaction between styryl and methacrylic radicals with Cu(I) most likely occurs at rates which do not significantly affect the kinetics and molecular weights. This finding may be significant in the design of future catalysts/materials. This interaction between a lower oxidation state metal and the propagating radical is a novel method for affecting the molecular weight of the resulting polymer chain without the use of chain transfer agents.

DETD [0141] It is also possible to use multifunctional initiators having one or more initiation sites for ATRP and one or more initiation sites capable of initiating a non-ATRP polymerization. The non-ATRP polymerization can include any polymerization mechanism, including, but not limited to, cationic, anionic, free radical, metathesis, ring opening and coordination polymerizations. Exemplary multifunctional initiators include, but are not limited to, 2-bromopropionyl bromide (for cationic or ring opening polymerizations and ATRP); halogenated AIBN derivatives or halogenated peroxide derivatives (for free radical and ATRP polymerizations); and 2-hydroxyethyl 2-bromopropionate (for anionic and ATRP polymerizations).

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(FILE 'HOME' ENTERED AT 16:54:17 ON 09 MAY 2007)

SET ABBR ON PERM

SET PLURALS ON PERM

FILE 'USPATFULL, USPAT2, JAPIO, CAPLUS' ENTERED AT 16:55:08 ON 09 MAY 2007

L1 517 SEA ABB=ON PLU=ON (CHAIN TRANSFER) (S) (METATHESIS OR METATHETI
CAL? OR METATHESIZ? OR RING(1W) OPEN?)

L2 1983 SEA ABB=ON PLU=ON (PEROXID? OR AZO? OR DIAZO?) (S) (METATHESIS
OR METATHETICAL? OR METATHESIZ? OR RING(1W) OPEN?)

L3 37 SEA ABB=ON PLU=ON L1 AND L2
D L3 1-37 IBIB ABS

L4 1395 SEA ABB=ON PLU=ON (DIVINYLBENZENE OR DIVINYL(1W) BENZENE OR
TRIVINYLBENZENE OR TRIVINYL(1W) BENZENE) (S) (NORBORNEN? OR
DICYCLOPENTADIEN? OR TRICYCLOPENTADIEN?)

L5 74 SEA ABB=ON PLU=ON (PEROXID? OR AZO? OR DIAZO?) (S) ((METATHESI?
OR METATHETICAL?) (3A) (RING(1W) OPEN?))

L6 1 SEA ABB=ON PLU=ON L4 AND L5
D L6 1 IBIB ABS
D L6 1 HIT

L7 11 SEA ABB=ON PLU=ON L5 AND (CHAIN TRANSFER?) (2A) (AGENT# OR
COMPOUND?)
D L7 1-11 IBIB ABS
D L7 11 IBIB HIT
D L7 6 IBIB HIT
D L7 3 IBIB HIT

FILE HOME

FILE USPATFULL

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 May 2007 (20070508/PD)

S/N 10/567,782

FILE LAST UPDATED: 8 May 2007 (20070508/ED)
HIGHEST GRANTED PATENT NUMBER: US7216369
HIGHEST APPLICATION PUBLICATION NUMBER: US2007101471
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USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Oct 2006

FILE USPAT2

FILE COVERS 2001 TO PUBLICATION DATE: 8 May 2007 (20070508/PD)
FILE LAST UPDATED: 8 May 2007 (20070508/ED)
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FILE JAPIO

FILE LAST UPDATED: 27 APR 2007 <20070427/UP>
FILE COVERS APRIL 1973 TO JANUARY 25, 2007

>>> GRAPHIC IMAGES AVAILABLE <<<

FILE CAPLUS

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COST IN U.S. DOLLARS

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| 243.81 | 244.23 |

FULL ESTIMATED COST

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)

| SINCE FILE | TOTAL |
|------------|---------|
| ENTRY | SESSION |
| -6.24 | -6.24 |

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